

Application Serial No.: 10/024,891

30203/37573

LISTING OF THE CLAIMS

1. (Currently Amended) A method of configuring a process plant related to analyzing a plurality of process control instruments capable of use in a specific process control environment, comprising:

receiving process data related to the specific process control environment, in which at least one of the plurality of process control instruments is potentially to be used, via a computer device;

receiving device data related to one or more characteristics for each of the plurality of process control instruments;

using the computer device and the received device data and the process data to model the operation of each of the plurality of process control instruments within the specific process control environment ~~defined by the received data;~~

determining from the modeled operation of each of the plurality of process control instruments, using the computer device, one or more performance characteristics for each of the plurality of process control instruments indicating the modeled performance of each of the process control instruments when used in the specific process control environment; and

displaying the performance characteristics for each of the plurality of the process control instruments simultaneously via the computer device.

2. (Canceled)

3. (Currently Amended) The method of claim 1, further including retrieving, from a memory of the computer device, the performance characteristics for each of the plurality of process control instruments based on the received process data.

4. (Original) The method of claim 1, wherein the computer device is a personal computer.

5. (Original) The method of claim 1, where the computer device is a web-enabled device.

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6. (Original) The method of claim 1, wherein the plurality of process control instruments are each flow meters.

7. (Original) The method of claim 1, wherein at least one of the plurality of process control instruments is a Coriolis type of flow meter.

8. (Original) The method of claim 1, wherein at least one of the plurality of process control instruments is a vortex type of flow meter.

9. (Original) The method of claim 1, wherein at least one of the plurality of process control instruments is a magnetic type of flow meter.

10. (Original) The method of claim 1, wherein at least one of the plurality of process control instruments is a differential pressure type of flow meter.

11. (Original) The method of claim 1, wherein at least one of the plurality of process control instruments is a thermal mass type of flow meter.

12. (Original) The method of claim 1, wherein at least one of the plurality of process control instruments is an ultrasonic type of flow meter.

13. (Currently Amended) The method of claim 1, wherein receiving process data related to the specific process control environment includes entering the process data through a keyboard of the computer device.

14. (Currently Amended) The method of claim 1, wherein receiving process data related to the specific process control environment includes downloading the process data from a memory.

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15. (Currently Amended) The method of claim 1, wherein receiving process data related to the specific process control environment is performed by importing the process data from a database.

16. (Previously Presented) The method of claim 1, wherein determining the one or more performance characteristics includes calculating the one or more performance characteristics of each of the plurality of process control instruments over an entire range of operation of each process control instrument.

17. (Previously Presented) The method of claim 16, wherein displaying involves displaying performance characteristics of each of the plurality of process control instruments in a graphical manner.

18. (Previously Presented) The method of claim 17, wherein displaying provides a comparison between installed performance and performance at reference conditions.

19. (Previously Presented) The method of claim 1, wherein the process control instruments are flow meters and wherein displaying provides performance data as a function of flow rate from a maximum level to a minimum level.

20. (Previously Presented) The method of claim 1, wherein determining the one or more performance characteristics further includes calculating the size of the process control instrument needed to satisfy the process control application.

21. (Currently Amended) The method of claim 1, further including saving the received process data in a memory of the computer device.

22. (Currently Amended) The method of claim 21, further including assigning an electronic tag to the saved process data to facilitate later retrieval.

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23. (Currently Amended) The method of claim 1, wherein receiving the process data includes receiving a selection of the plurality of process control instruments to be used in the analysis.

24. (Previously Presented) The method of claim 1, wherein the process control instruments are each flow meters, and wherein the determining the one or more performance characteristics includes calculating flow meter accuracy as a continuous function of flow rate.

25. (Previously Presented) The method of claim 1, wherein the process control instruments are each flow meters, and wherein determining the one or more performance characteristics includes calculating straight pipe requirements for each of the flow meters.

26. (Previously Presented) The method of claim 1, wherein the process control instruments are each flow meters, and wherein determining the one or more performance characteristics includes calculating fluid pressure losses for each of the flow meters.

27. (Previously Presented) The method of claim 26, wherein determining the one or more performance characteristics includes the calculation of pressure loss due to pipe fittings.

28. (Original) The method of claim 27, wherein the calculated performance characteristics are displayed graphically.

29. (Original) The method of claim 28, wherein the graphical display includes pictorial representations of pipe, pipe fittings, and flow meters.

30. (Previously Presented) The method of claim 1, wherein determining the one or more performance characteristics involves calculating installed costs associated with the plurality of process control instruments.

31-50. (Canceled)